



MontCAS Criterion-Referenced Test (CRT) Student Report 2011

Letter from Superintendent

Dear Parents/Guardians:

The Montana Comprehensive Assessment System (MontCAS) Criterion-Referenced Test (CRT) is the state's measure of student performance on the state content standards which establish goals for what all students should know and be able to do.

The CRT assesses Reading and Math at grades 3-8 and 10. Students in grades 4, 8, and 10 are also assessed in Science. The assessment contains multiple-choice questions, math short answer questions, and constructed response items. The constructed response items give students the opportunity to explain answers and solve problems using multiple strategies.

This report shows how your student performed on the March 2011 CRT. The results of this standards-based assessment are reported in four performance levels: Advanced, Proficient, Nearing Proficiency, and Novice. While some students may not yet meet the standards, keep in mind that the standards are rigorous and challenging. Our long term goal is for all students to achieve these high standards so that Montana youth will be among the best educated in the world. The staff at your school will be able to provide further information about your student's performance on the CRT.

The CRT is only one measure of student performance and should be viewed in the context of the student's local programs and other measures. The CRT is required by the No Child Left Behind Act and is part of an ongoing statewide educational improvement process. I encourage you to contact your student's school to begin a conversation that will support your student's success.

Sincerely,

Denise Juneau
Montana Superintendent of Public Instruction
Montana Office of Public Instruction
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What can you do to help your student?

It is important to support your student in his or her studies now and throughout his or her future education.

Here are some tips for supporting your student in the completion of his or her schoolwork:

- Have regular discussions with your student's teacher(s) to see what you can do at home to support your student's work in school, such as making sure homework is done.
- Discuss with your student the subjects in which he or she needs improvement. Talk about whether there has been a noticeable improvement. If not, find out why.
- Ask your student to explain what he or she is studying. These conversations help you to follow your student's progress and help your student to remember what he or she has learned.
- Make sure your student gets enough rest, eats properly, and arrives at school on time every day. Send your student to school prepared to learn.

What is the MontCAS Criterion-Referenced Test (CRT)?

The Montana Comprehensive Assessment System (MontCAS) was developed in accordance with the following federal laws: Title 1 of the Elementary and Secondary Education Act (ESEA) of 1994, P. L. 103-382, and the No Child Left Behind Act (NCLB) of 2001.

The CRT test questions are based on, and aligned to, Montana's content standards, benchmarks, and grade-level expectations in Mathematics, Reading, and Science. Montana educators worked with the Montana Office of Public Instruction and Measured Progress to develop test questions that assess how well students have met Montana grade-level expectations for each

MontCAS CRT scores are intended to be useful indicators of the extent to which students have mastered the materials outlined in the Montana Mathematics, Reading, and Science content standards, benchmarks, and grade-level expectations.

Who must take the CRT?

All classroom students in grades 3-8 and 10 enrolled for 180 hours or more in an accredited public or private Montana school are required to participate.

What subjects were tested in spring 2011?

| | |
|-------------|---------------------|
| Mathematics | Grades 3-8 and 10 |
| Reading | Grades 3-8 and 10 |
| Science | Grades 4, 8, and 10 |

What types of test questions are on the CRT?

- Multiple-choice questions: Students choose the correct answer from four options and receive one point for each correct answer and zero points for an incorrect answer.
- Constructed-response questions: Depending on the subject tested, students are asked to explain and/or make a chart, table, diagram, illustration, or graph to support their answer. Each answer receives zero to four points.
- Short-answer questions (Mathematics tests only): Students give a brief response, which is usually a number or short statement. Students receive one point for a correct answer and zero points for an incorrect answer.

How are the CRT results used?

MontCAS CRT test results are used for the following purposes:

- to assist educators in planning improvements to curriculum and instruction
- to determine whether schools are helping their students meet the state content standards

Where can you find more information?

Where can you find more information:
<https://data.opi.mt.gov/opireportingcenter>

Montana requirements for the participation of students with disabilities on the CRT:
http://www.opi.mt.gov/Curriculum/MontCAS/#p7GPd_7

OPI contact: Judy Snow, State Assessment
Director, 406-444-3656,
jsnow@mt.gov

Your student's performance level and score in each content area

Display of scores and probable range of scores

In the figure below your student's performance is displayed. For each subject, the left column lists the possible performance levels with the scores needed to achieve those levels. The center column is your student's performance where the black bar is their score and the small grey bar is the range of scores they might have achieved had they taken the test multiple times. The right hand column is the percentage of students that achieved each performance level on the CRT across the state.

Example: Your child's score → 240
← Range of likely scores if your child took the test many times

| Mathematics | | | Reading | | | Science | | |
|--------------------------------|---------|------------------|--------------------------------|---------|------------------|--------------------------------|---------|------------------|
| Performance Levels | Student | State percentage | Performance Levels | Student | State percentage | Performance Levels | Student | State percentage |
| Advanced 283-300 | | 27% | Advanced 289-300 | | 56% | Advanced 283-300 | | 15% |
| Proficient 250-282 | | 39% | Proficient 250-288 | 273 | 29% | Proficient 250-282 | | 50% |
| Nearing Proficiency 225-249 | 243 | 22% | Nearing Proficiency 225-249 | | 9% | Nearing Proficiency 225-249 | 253 | 24% |
| Novice 200-224 | | 12% | Novice 200-224 | | 7% | Novice 200-224 | | 11% |

Your student's Mathematics Scaled Score is **243** which is at the **Nearing Proficiency Level**. Your student's possible range of scores is from 234 to 252.

Students at this level demonstrate a partial understanding of subject matter and are able to:

- Express a ratio as a fraction or decimal.
- Identify a proportion that can be used to relate quantities in a real-world situation.
- Identify an inequality or equation with one variable that describes a real-world situation.
- Extend an arithmetic sequence at least three terms.
- Interpret the meaning of the y-intercept of the graph of a linear function in a real-world context.
- Identify a single transformation applied to a figure that produces a given image.
- Calculate the area of a triangle or quadrilateral on or off the coordinate plane.
- Identify a strategy to collect data that is most representative of a group.
- Calculate the simple probability of a single event.

Your student's Reading Scaled Score is **273** which is at the **Proficient Level**. Your student's possible range of scores is from 263 to 283.

Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems. Using grade-level text, the student is able to:

- Use emerging content vocabulary.
- Apply complex thinking skills: connect ideas, make predictions, explain causal relationships, and use metaphorical thinking and emerging inference skills.
- Demonstrate an emerging understanding of literary elements and an emerging/basic figurative comprehension.
- Use word structures to enhance meaning.
- Recognize different genres.
- Basic recognition of figurative language.
- Set, monitor progress toward, and meet reading goals.

Your student's Science Scaled Score is **253** which is at the **Proficient Level**. Your student's possible range of scores is from 245 to 261.

Students at this level demonstrate a solid understanding of challenging subject matter and are able to:

- Identify and communicate testable questions, safely plan and conduct experimental investigations, communicate results, and communicate that observation is a key inquiry process used by Montana American Indians.
- Given supporting detail, describe the physical world through the application of simple chemical reactions; chemical formulas; and physical, theoretical, and mathematical models.
- Identify and classify biotic (living) and abiotic (non-living) objects through the application of common classification schemes; identify the interdependence of life and the environment; and explain how characteristics of living things change because of the environment.
- Describe and explain the structure and function of the lithosphere, hydrosphere, and atmosphere of the Earth and the universe.
- Describe connections and interactions among technology, science, and society by applying scientific inquiry.
- Describe scientific information related to current events and the impact on local problems.
- Independently identify and describe examples of how science and technology are the results of human activity throughout history, seek new information that connects past to present, and describe influences of science and technology on Montana American Indian cultures.
- Describe and explain multiple examples of Montana American Indian contributions to scientific and technological knowledge.

Scores on Montana Content Standards

CRT results are reported for Montana Content Standards in Mathematics, Reading, and Science to provide standard-specific information about the student's achievement. The results can be used to show the student's relative performance on the standards within a content area.

| Mathematics | Total Possible Points | Points Earned by Your Student | Range of Points Earned by Students Who Have Achieved Proficiency in the State |
|---|--|-------------------------------|---|
| 1. Problem Solving | This standard is assessed within the frameworks of standard 2-7. | | |
| 2. Numbers and Operations | 18 | 7 | 2-17 |
| 3. Algebra | 8 | 4 | 0-8 |
| 4. Geometry | 12 | 3 | 1-12 |
| 5. Measurement | 8 | 4 | 0-8 |
| 6. Data Analysis, Statistics, and Probability | 12 | 7 | 3-12 |
| 7. Patterns, Relations, and Functions | 8 | 4 | 0-8 |
| Reading | Total Possible Points | Points Earned by Your Student | Range of Points Earned by Students Who Have Achieved Proficiency in the State |
| 1. Students construct meaning as they comprehend, interpret, and respond to what they read. | 17 | 14 | 5-17 |
| 2. Students apply a range of skills and strategies to read. | 17 | 11 | 5-16 |
| 3. Students set goals, monitor, and evaluate their reading progress. | This standard is not measurable in a statewide assessment. | | |
| 4. Students select, read, and respond to print and nonprint material for a variety of purposes. | 10 | 6 | 2-10 |
| 5. Students gather, analyze, synthesize, and evaluate information from a variety of sources, and communicate their findings in ways appropriate for their purposes and audiences. | 16 | 7 | 3-15 |
| Science | Total Possible Points | Points Earned by Your Student | Range of Points Earned by Students Who Have Achieved Proficiency in the State |
| 1. Scientific Investigations | 14 | 6 | 2-14 |
| 2. Physical Science | 14 | 5 | 2-13 |
| 3. Life Science | 14 | 10 | 3-14 |
| 4. Earth/Space Science | 14 | 8 | 3-14 |
| 5. Impact on Society | Subscores are not reported for this standard. | | |
| 6. Historical Development | Subscores are not reported for this standard. | | |